RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 Promenade Street, Providence, Rhode Island 02908

October 11, 2018

CERTIFIED MAIL

Mr. Steven Renshaw
General Manager
Greenwich Club, Inc.
5426 Post Road
East Greenwich, RI 02818

RE: Final Permit for Greenwich Club
RIPDES Permit No. RI0023434

Dear Mr. Renshaw:

Enclosed is your final Rhode Island Pollutant Discharge Elimination System (RIPDES) Permit issued pursuant to the referenced application. State regulations, promulgated under Chapter 46-12 of the Rhode Island General Laws of 1956, as amended, require this permit to become effective on the date specified in the attached permit.

Also enclosed is information relative to hearing requests and stays of RIPDES Permits.

We appreciate your cooperation throughout the development of this permit. Should you have any questions concerning this permit, feel free to contact Samuel Kaplan of the State Permits Staff at (401) 222-4700, extension 7046.

Sincerely,

Joseph B. Haberek, PE
Supervising Sanitary Engineer

JBH:sk

Enclosures

Ecc: Traci Pena, RIDEM-OWR
Crystal Charbonneau, RIDEM-OWR

RESPONSE TO COMMENTS

NO SIGNIFICANT COMMENTS WERE RECEIVED ON THE DRAFT PERMIT FOR THIS FACILITY; THEREFORE, NO RESPONSE WAS PREPARED.

HEARING REQUESTS

If you wish to contest any of the provisions of this permit, you may request a formal hearing within thirty (30) days of receipt of this letter. The request should be submitted to the Administrative Adjudication Division at the following address:

Michelle Janvrin, Clerk
Department of Environmental Management
Office of Administrative Adjudication
235 Promenade Street
3rd Floor, Rm 350
Providence, RI 02908

Any request for a formal hearing must conform to the requirements of Rule 49 of the State Regulations.

STAYS OF RIPDES PERMITS

Should the Department receive and grant a request for a formal hearing, the contested conditions of the permit will not automatically be stayed. However, the permittee, in accordance with Rule 50, may request a temporary stay for the duration of adjudicatory hearing proceedings. Requests for stays of permit conditions should be submitted to the Office of Water Resources at the following address:

Angelo S. Liberti, P.E.
Chief of Surface Water Protection
Office of Water Resources
235 Promenade Street
Providence, Rhode Island 02908

All uncontested conditions of the permit will be effective and enforceable in accordance with the provisions of Rule 49.

AUTHORIZATION TO DISCHARGE UNDER THE RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

Greenwich Club, Inc.
P.O. Box 411
East Greenwich, RI 02818

is authorized to discharge from a facility located at

Greenwich Club, Inc.
5426 Post Road
East Greenwich, RI 02818

to ultimate receiving waters named

Nelson Brook

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on January 1, 2019.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supercedes the permit issued on March 21, 2012.

This permit consists of 5 pages in Part I including effluent limitations, monitoring requirements, etc. and 10 pages in Part II, General Conditions.

Signed this 12th day of October, 2018.

Angelo S. Liberti, P.E., Chief of Surface Water Protection
Office of Water Resources
Rhode Island Department of Environmental Management
Providence, Rhode Island

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number 001A (Dechlorinated Main and Youth swimming pool discharges and filter backwash discharges prior to entering the DOT stormdrain). Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations					Monitoring Requirement	
	Quantity		Concentration				
	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow		415.5 gpm				1/Discharge[3]	estimate
Chlorine Residual[1]					19 µg/l[2]	1/Discharge[3]	grab
Enterococci					54 colonies/100 ml	1/Discharge[3]	grab

1. Total Residual Chlorine (TRC) shall be tested using Low Level Amperometric Titration or the DPD Spectrophotometric method. The EPA approved methods are found in Standard Methods for the Examination of Water and Wastewater, 18th Edition, Method 4500-Cl E and Method 4500-Cl G or U.S.E.P.A. Manual of Methods of Analysis of Water and Wastes, Method 330.5.

2. The limit at which compliance/ non-compliance determinations shall be based is the Quantitation Limit (QL). For this permit, the QL for residual chlorine is defined as 20 µg/l. This value may be reduced by permit modification as more sensitive test methods are approved by the EPA and the State.

3. Samples shall be taken within the first thirty (30) minutes of any discharges of either dechlorinated main pool water, dechlorinated youth pool water, or dechlorinated pool backwash water.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: outfall 001A. (Dechlorinated Main and Youth swimming pool discharges and filter backwash discharges prior to entering the DOT stormdrain; the sampling location for outfall serial number 001A is inside the pump house).

3. a. The discharge shall not cause visible discoloration of the receiving waters.

b. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time. Immediately prior to commencement of the discharge, the permittee shall skim the pool(s).

c. The permittee shall follow all terms and conditions of the dechlorination and discharge plan as received and approved by this Office on May 18, 2000. The plan shall not be modified without written approval of the Office of Water Resources. Should the permittee demonstrate to this Office that concentration limits for chlorine residual can be met at the point of discharge without prior dechlorination of the effluent, TRC monitoring requirements may be eliminated. TRC monitoring shall continue until a request to eliminate monitoring is approved in writing by DEM. Should the permittee demonstrate to this Office that concentration limits for chlorine residual can be met at the point of discharge without prior dechlorination of the effluent, TRC monitoring requirements may be eliminated. TRC monitoring shall continue until a request to eliminate monitoring is approved in writing by DEM.

d. This permit authorizes discharge from the 220,000 gallon main pool and the 12,500 gallon toddler pool, during dry weather only. This permit also authorizes discharge of filter backwash as described in the plan received on May 18, 2000. This permit also authorizes discharges of pool vacuum water. This permit does not authorize any other discharges, including but not limited to pool cleaning water.

4. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) One hundred micrograms per liter (100 ug/l);

(2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitro-phenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. s122.21(g) (7); or

(4) Any other notification level established by the Director in accordance with 40 C.F.R. s122.44(f) and Rhode Island Regulations.

b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(1) Five hundred micrograms per liter (500 ug/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. s122.21(g)(7); or

(4) Any other notification level established by the Director in accordance with 40 C.F.R. s122.44(f) and Rhode Island Regulations.

c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or by-product any toxic pollutant which was not reported in the permit application.

5. This permit serves as the State's Water Quality Certificate for the discharges described herein.

B. MONITORING AND REPORTING

The monitoring program in the permit specifies sampling and analysis, which will provide continuous information on compliance and the reliability and effectiveness of the installed pollution abatement equipment. The approved analytical procedures found in 40 CFR Part 136 are required unless other procedures are explicitly required in the permit. The Permittee is obligated to monitor and report sampling results to the DEM within the time specified within the permit.

Unless otherwise specified in this permit, the permittee shall submit reports, requests, and information and provide notices in the manner described in this section.

1. Submittal of DMRs Using NetDMR

The permittee shall continue to submit its yearly monitoring data in discharge monitoring reports (DMRs) to DEM electronically no later than the 15th day of January of each year using NetDMR. When the permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to DEM.

2. Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the permittee must submit electronic copies of documents in NetDMR that are directly related to the DMR. These include the following:

- DMR Cover Letters
- Below Detection Limit summary tables

3. Submittal of Reports in Hard Copy Form

The following notifications and reports shall be submitted as hard copy with a cover letter describing the submission. These reports shall be signed and dated originals submitted to DEM.

A. Written notifications required under Part II

B. Notice of unauthorized discharges
C. Requests for changes to Permit conditions

This information shall be submitted to DEM at the following address:

Rhode Island Department of Environmental Management
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908

4. Verbal Reports and Verbal Notifications

Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shall be made to the DEM. This includes verbal reports and notifications which require reporting within 24 hours. (See Part II.(l)(5) General Requirements for 24-hour reporting) Verbal reports and verbal notifications shall be made to DEM at (401) 222-4700 or (401) 222-3070 at night.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 PROMENADE STREET
PROVIDENCE, RHODE ISLAND 02908

STATEMENT OF BASIS

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) PERMIT TO DISCHARGE TO WATERS OF THE STATE

RIPDES PERMIT NO. **RI0023434**

NAME AND ADDRESS OF APPLICANT:

Greenwich Club, Inc.
P.O. Box 411
East Greenwich, RI 02818

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Greenwich Club, Inc.
5426 Post Road
East Greenwich, RI 02818

RECEIVING WATER:

Nelson Brook
(Waterbody ID#: RI0007028R-07)

CLASSIFICATION: B

I. Proposed Action, Type of Facility, and Discharge Location

The above-named applicant has reapplied to the Rhode Island Department of Environmental Management for a RIPDES Permit to discharge pool effluent into a Rhode Island Department of Transportation (RIDOT) storm drain system that discharges into the designated receiving water. The discharge will occur during summer months only, and is prohibited during storm events.

II. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters based on DMR data from January 2012 through December 2016 is shown on Attachment A-1.

III. Permit Limitations and Conditions

The effluent limitations of the permit, the monitoring requirements, and any implementation schedule (if required) may be found in the draft permit.

IV. Permit Basis and Explanation of Effluent Limitation Derivation

Introduction

The Greenwich Club is a social and recreational facility. The discharge consists of chlorinated water from a 220,000 gallon pool and a 12,500 gallon pool. The main pool (220,000 gallons) will be emptied once per season (Memorial Day through Labor Day), and the youth pool (12,500 gallons) will be emptied as necessary depending on weather and pool use. Discharge of filter backwash may occur six to seven times per season, as required. Pool effluent, filter backwash, and pool vacuum water will be directed to a RIDOT catch basin, and will pass through a 70,000 gallon wet retention basin before reaching Nelson Brook. RIDOT has authorized connection to the storm drainage system provided water is drained during off-peak times (in non-storm events).

Outfall

Outfall 001A consists of dechlorinated main and youth swimming pool discharges, filter backwash discharges, and pool vacuum water prior to entering the DOT stormdrain. This outfall is being maintained, with the clarification that the sampling location for outfall serial number 001A is inside the pump house. This clarification is stated at the bottom of Part I.A.1 on pg. 2 of the permit.

Receiving Water Description

The water body segment that receives the discharge from the Greenwich Club is Nelson Brook (also known as Pierce Brook). The waterbody identification for this water body is RI0007028R-07. This segment is located in East Greenwich and is classified as a Class B water body according to the Rhode Island Water Quality Regulations. These waters are designated for fish and wildlife habitat and primary and secondary contact recreational activities. They shall be suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value. This receiving water is listed as being impaired for Enterococcus on DEM's most recent 303d list (from 2014).

Permit Development

Development of RIPDES permit limitations is a multi-step process consisting of the following steps: calculating allowable water quality-based discharge levels using instream criteria, background data and available dilution; determining if technology based limits apply; developing Best Professional Judgment (BPJ)-based limits; taking the most stringent of the water quality-based, technology-based, and BPJ-based limits as the new allowable discharge levels; comparing existing permit limits to the new allowable discharge levels and performing an antidegradation/antibacksliding analysis to determine the final permit limits; and evaluating the ability of the facility to meet the final permit limits.

Water quality criteria are comprised of numeric and narrative criteria. Numeric criteria are scientifically derived ambient concentrations developed by EPA or the State for various pollutants of concern to protect human health and aquatic life. Narrative criteria are statements that describe the desired water quality goal. A technology-based limit is a numeric limit, which is determined by examining the capability of a treatment process to reduce or eliminate pollutants.

The requirements set forth in this permit are from the State's Water Quality Regulations and the State's Regulations for the Rhode Island Pollutant Discharge Elimination System, both filed pursuant to Chapter 46-12, as amended. RIDEM's primary authority over the permit comes from EPA's delegation of the program in September 1984 under the Federal Clean Water Act (CWA).

Flow

The flow limit is based on maximum daily flow rate projections supplied by the facility.

WWTF Toxic Pollutant Limits

The allowable effluent limitations were established on the basis of acute and chronic aquatic life criteria and human health criteria using the following: available instream dilution; an allocation factor; and background concentrations when available and/or appropriate. The aquatic life and human health criteria are specified in the Rhode Island Water Quality Regulations. Aquatic life criteria have been established to ensure the protection and propagation of aquatic life while human health criteria represent the pollutant levels that would not result in a significant risk to public health from ingestion of aquatic organisms. The more stringent of the two criteria was then used in establishing allowable effluent limitations. Details concerning the calculation of potential permit limitations, selection of factors, which influence their calculation, and the selection of final permit limitations are included below or in the attached documents.

Dilution Factor

In the absence of a site-specific dilution factor, the DEM has assigned a conservative dilution factor for the facility of 1 (one).

Using the above-mentioned dilution factor of 1, the allowable discharge limits were calculated as follows:

Due to a lack of available background data, the potential permit limit for each parameter was calculated as follows:

$$Limit_1 = (DF) * (Criteria) * (80\%)$$

Where: DF = acute dilution factor = chronic dilution factor = 1

Based on the above dilution factors and the freshwater aquatic life and non-Class A human health criteria from the Rhode Island Water Quality regulations, allowable discharge concentrations were established using 80% allocation.

The formulas and data noted above were applied with the following exceptions:

A) Pollutants that, based on the acute and chronic dilution factors, have a higher allowable chronic limit than allowable acute limit. For this situation, both the "Monthly Average" and "Daily Maximum" limits were set at the allowable acute limit.

B) Total Residual Chlorine (TRC). The limits for TRC were established in accordance with the DEM Effluent Disinfection Policy. The "Daily Maximum" limit was based on a 100% allocation, a zero background concentration, and the appropriate dilution factor. The 100% allocation factor for TRC was used due to the non-conservative nature of chlorine

and the improbability of the receiving water having a detectable background TRC concentration.

DEM has maintained Chlorine Residual limits in the 2018 permit to ensure the protection of the receiving water, given that the facility has exhibited two instances of Chlorine Residual exceedances between 2012 and 2016.

The potential ammonia limitations were derived from acute and chronic water quality criteria for freshwater from the Rhode Island Water Quality Regulations, which are based upon an upper 90th percentile pH of 7.9 S.U., a winter temperature of 15ºC, a summer temperature of 26ºC, and the absence of salmonids in Nelson Brook. These parameters were used to calculate the allowable water quality-based discharge levels for ammonia.

Reference Attachment A-2 for calculations of allowable limits based on Aquatic Life and Human Health Criteria.

Bacteria

The Entercocci limit was set using Table 2.8.D(3) of the Rhode Island Water Quality Regulations for Water Pollution Control. The Enterococci limit was set equal to the Enterococci criteria of a geometric mean density of 54 colonies/100 ml for non-designated bathing beach waters.

Anti-backsliding/Anti-degradation

Antibacksliding

Antibacksliding restricts the level of relaxation of water quality based limits from the previous permit. Section 303(d)(4) of the Clean Water Act addresses antibacksliding as the following:

Section 303(d)(4)

A) Standards not attained - For receiving waters that have not attained the applicable water quality standards, limits based on a TMDL or WLA can only be revised if the water quality standards will be met. This may be done by (i) determining that the cumulative effect of all such revised limits would assure the attainment of such water quality standards; or (ii) removing the designated use which is not being attained in accordance with regulations under Section 303.

B) Standards attained - For receiving waters achieving or exceeding applicable water quality standards, limits can be relaxed if the revision is consistent with the State's Antidegradation Policy.

Therefore, in order to determine whether backsliding is permissible, the first question that must be answered is whether or not the receiving water is attaining the water quality standard. The Office has determined the most appropriate evaluation of existing water quality is by calculating the pollutant levels, which would result after consideration of all currently valid RIPDES permit limits or historic discharge data (whichever is greater), background data (when available), and any new information (i.e.: dilution factors).

Antidegradation

The RIDEM's "Policy on the Implementation of the Antidegradation Provisions of the Rhode Island Water Quality Regulations July 2006" (the Policy) establishes four tiers of water quality protection:

> **Tier 1**. In all surface waters, existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
>
> **Tier 2**. In waters where the existing water quality exceeds levels necessary to support propagation of fish and wildlife, and recreation in and on the water, that quality shall be maintained and protected, except for insignificant changes in water quality as determined by the Director and in accordance with the Antidegradation Implementation Policy, as amended. In addition, the Director may allow significant degradation which is determined to be necessary to achieve important economic or social benefits to the State in accordance with the Antidegradation Implementation Policy, as amended.
>
> **Tier 2½**. Where high quality waters constitute a Special Resource Protection Water SRPW[1], there shall be no measurable degradation of the existing water quality necessary to protect the characteristic(s) which cause the waterbody to be designated a SRPW. Notwithstanding that all public drinking water supplies are SRPWs, public drinking water suppliers may undertake temporary and short-term activities within the boundary perimeter of a public drinking water supply impoundment for essential maintenance or to address emergency conditions in order to prevent adverse effect on public health or safety. These activities must comply with the requirements set forth in Tier 1 and Tier 2.
>
> **Tier 3**. Where high quality waters constitute an Outstanding Natural Resource ONRWs[2], that water quality shall be maintained and protected. The State may allow some limited activities that result in temporary and short-term changes in the water quality of an ONRW. Such activities must not permanently degrade water quality or result in water quality lower than necessary to protect the existing uses in the ONRW.

The formulas previously presented ensure that permit limitations are based upon water quality criteria and methodologies established to ensure that all designated uses will be met.

In terms of the applicability of Tier 2 of the Policy, a water body is assessed as being high quality on a parameter-by-parameter basis. In accordance with Part II of the Policy, "Antidegradation applies to all new or increased projects or activities which may lower water quality or affect existing water uses, including but not limited to all 401 Water Quality Certification reviews and any new, reissued, or modified RIPDES permits." Part VI.A of the Policy indicates that it is not applicable to activities which result in insignificant (i.e.: short-term minor) changes in water quality and that significant changes in water quality will only be allowed if it is necessary to accommodate important economic and social development in the area in which the receiving waters are located (important benefits demonstration). Part VI.B.4 of the Policy states that: "Theoretically, any new or increased discharge or activity could lower existing water quality and thus require the important benefits demonstration. However, RIDEM will: 1) evaluate applications on a case-by-case basis, using BPJ and all pertinent and available facts, including scientific and technical data and

[1]SRPWs are surface waters identified by the Director as having significant recreational or ecological uses.

[2]ONRWs are a special subset of high quality water bodies, identified by the State as having significant recreational or ecological water uses.

calculations as provided by the applicant; and 2) determine whether the incremental loss is significant enough to require the important benefits demonstration described below. [If not then as a general rule RIDEM will allocate no more than 20%.] Some of the considerations which will be made to determine if an impact is significant in each site specific decision are: 1) percent change in water quality parameter value and their temporal distribution; 2) quality and value of the resource; 3) cumulative impact of discharges and activities on water quality to-date; 4) measurability of the change; 5) visibility of the change; 6) impact on fish and wildlife habitat; and 7) impact on potential and existing uses. As a general guide, any discharge or activity which consumes greater than 20% of the remaining assimilative capacity (See Section VI.B.2) will be considered a significant impact and will be required to demonstrate important economic or social benefits to justify the activity (See Section VI.C. below). However, on a case-by-case basis, any proposed percent consumption of the remaining assimilative capacity may be deemed significant and invoke full requirements to demonstrate important economic or social benefits."

In terms of a RIPDES permit, an increased discharge is defined as an increase in any limitation, which would result in an increased mass loading to a receiving water. The baseline for this comparison would be the monthly average mass loading established by the previous permit. It would be inappropriate to use the daily maximum mass loading since the Policy is not applicable to short-term changes in water quality.

For the purposes of ensuring that the revised limit is consistent with the requirements of antidegradation, existing water quality must be defined. As explained earlier, RIDEM evaluates existing water quality by determining the pollutant levels which would result under the design conditions appropriate for the particular criteria (i.e., background water quality, when available and/or appropriate; non-point source inputs; and existing RIPDES permit limitations or recent historical discharge data, whichever is higher). In general, available data would be used to make this determination.

Using the above-mentioned criteria, the present instream water quality C_p is defined as:

$$C_p = \frac{(DF - 1) * C_b + (1 * C_d)}{DF}$$

where: C_b = background concentration[3]
C_d = discharge data[4]
DF = dilution factor

If the waterbody is a high quality water for the pollutant in question ($C_p < C_{criteria}$), then the discharge requires an evaluation under Tier 2 protection. If the waterbody is not determined to be high quality for that parameter, then antibacksliding will allow an increased permit limit only if it can be assured that water quality standards would be attained. Therefore, the permit limit would be calculated to comply with Tier 1 protection, using the procedures noted previously (i.e., $Limit_1$).

Assuming the receiving water has been designated as a high quality waterbody for the parameter under investigation, the next step is to determine whether the new or increased discharge is

[3]Data collected at a location that is unimpacted by significant point source discharges.

[4]Discharge data refers to the maximum of the permit limit or the historic discharge level. The historic discharge level is determined by calculating the upper 95th percent confidence interval for the monthly average reported data for the past five (5) years. For specific cases, changes in treatment efficiency or pretreatment limitations may support the use of an alternative period of time.

permissible and if so whether an important benefits demonstration is required. As explained above, for existing discharges RIDEM shall follow the general rule of allocating no more than 20% of the remaining assimilative capacity without the need to complete this demonstration (assuming the receiving water is not an SRPW or ONRW). On a case-by-case basis, the RIDEM may limit the allocation or determine that any incremental loss or impact to the receiving water is significant enough to require a detailed important benefits demonstration.

Water Quality Based Limits - Considering Antibacksliding and Antidegradation

As noted below, although the Total Residual Chlorine limits has been increased from 11 ug/L to 19 ug/L, the Quantitation limit of 20 ug/L, which is the level at which compliance is determined, has not changed. Therefore, detailed consideration of Antibacksliding and Antidegradation is not required for Total Residual Chlorine for the 2018 draft Greenwich Club permit because permit limits at which compliance is evaluated have not been made less stringent in comparison to the 2012 permit for this facility.

The discharge of pool vacuum water to outfall 001A is being listed in this permit for the first time, therefore a consideration of Antibacksliding and Antidegradation is required:

- Flow: The flow limit listed in Parts I.A.1. of the permit has not increased. Therefore, the effective total discharge flow rate permitted at any point in time under the 2018 permit will not be greater than the flow rate permitted under the 2012 permit.
- The Enterococci limit has not changed.
- The Total Residual Chlorine quantitation limit has not changed.

Since the flow limit has not increased, and since effluent limits have not been made less stringent in the 2018 permit, the addition of the pool vacuum water discharge to the permit via the existing outfall would not result in any additional pollutants being discharged to the waterbody. Given that the water body is impaired for Enterococci, Tier 1 of Antidegradation would apply. Tier 1 requires that existing uses be maintained. Adding a discharge that does not violate the water quality standard for Enterococci would not interfere with the water body's existing uses, therefore, the addition of vacuum water is acceptable under the Policy.

Attachment A-3 is a summary comparison of the allowable limits vs. the DMR (Discharge Monitoring Report) data.

Total Residual Chlorine

When calculating Total Residual Chlorine (TRC) limits 100% allocation of TRC was used due to the fact that chlorine is not expected to be found in ambient water and it is a non-conservative pollutant. Therefore, the permit limit is calculated using the following equation:

$$Limit_1 = (Criteria)*(100\%)$$

Based on the above mentioned equation, limits for chlorine were calculated as: Maximum Daily Limit (ug/L) = 19. The limit at which compliance/noncompliance determinations will be based is the Quantitation Limit which is defined as 20 ug/l for TRC. These values may be reduced by permit modification as more sensitive methods are approved by EPA and the State.

Final Permit Limitations

Presented in Table #1 is a summary of the permit limitations and the corresponding sampling frequency.

Table No.1 Final Permit Limitations – outfall 001A

Parameter	Monthly Average	Weekly Average	Daily Maximum
Flow			415.5 GPM
Chlorine Residual			19 µg/l[1]
Enterococci			54 colonies/100 ml

[1]Compliance with the limit for Chlorine Residual will be evaluated at the Quantitation Limit (QL) of 20 µg/l.

IV. Comment Period, Hearing Requests, and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the Rhode Island Department of Environmental Management, Office of Water Resources, 235 Promenade Street, Providence, Rhode Island, 02908-5767. A public hearing will be held after a thirty (30) day public notice. In reaching a final decision on the draft permit the Director will respond to all significant comments and make these responses available to the public at DEM's Providence Office.

Following the close of the comment period, and after the public hearing, the Director will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within thirty (30) days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of Rule 49 of the Regulations for the Rhode Island Pollutant Discharge Elimination System.

V. DEM Contact

Additional information concerning the permit may be obtained between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday, excluding holidays, from:

Samuel Kaplan, P.E.
Senior Engineer
Office of Water Resources, RIPDES Program
Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 222-4700 x 7046
email: samuel.kaplan@dem.ri.gov

8/29/18
Date

Joseph B. Haberek, P.E.
Supervising Sanitary Engineer
RIPDES Program

ATTACHMENT A-1

DISCHARGE: Outfall 001A
DESCRIPTION OF DISCHARGE: Dechlorinated Main and Youth swimming pool discharges and filter backwash discharges prior to entering the DOT stormdrain

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE:

PARAMETER	**MAXIMUM[1]**
Flow (gpm)	265.4
Chlorine Residual (µg/l)	25
Enterococci (colonies/100 ml)	6.25

[1]Data represents the mean of the daily maximum data Jan. 2012-Dec. 2016

ATTACHMENT A-2 – Water Quality Calculations

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY SPECIFIC DATA INPUT SHEET

NOTE: LIMITS BASED ON RI WATER QUALITY CRITERIA DATED JULY 2006

FACILITY NAME: **Greenwich Club**

RIPDES PERMIT #: **RI0023434**

	DISSOLVED BACKGROUND DATA (ug/L)	ACUTE METAL TRANSLATOR	CHRONIC METAL TRANSLATOR
ALUMINUM	**NA**	**NA**	**NA**
ARSENIC	**NA**	**1**	**1**
CADMIUM	**NA**	**1.002000673**	**0.967000673**
CHROMIUM III	**NA**	**0.316**	**0.86**
CHROMIUM VI	**NA**	**0.982**	**0.962**
COPPER	**NA**	**0.96**	**0.96**
LEAD	**NA**	**0.993001166**	**0.993001166**
MERCURY	**NA**	**0.85**	**0.85**
NICKEL	**NA**	**0.998**	**0.997**
SELENIUM	**NA**	**NA**	**NA**
SILVER	**NA**	**0.85**	**NA**
ZINC	**NA**	**0.978**	**0.986**
AMMONIA (as N)	**NA**		

USE NA WHEN NO DATA IS AVAILABLE

NOTE 1: METAL TRANSLATORS FROM RI WATER QUALITY REGS.

pH =	**7.9** S.U.
HARDNESS =	**25.0** (mg/L as CaCO3)

FLOW DATA	
DESIGN FLOW =	**0.598** MGD
=	0.926 CFS
7Q10 FLOW =	**0.000** CFS
7Q10 (JUNE-OCT) =	**0.000** CFS
7Q10 (NOV-MAY) =	**0.000** CFS
30Q5 FLOW =	**0.000** CFS
HARMONIC FLOW =	**0.000** CFS

DILUTION FACTORS	
ACUTE =	**1.000**
CHRONIC =	**1.000**
(MAY-OCT) =	**1.000**
(NOV-APR) =	**1.000**
30Q5 FLOW =	**1.000**
HARMONIC FLOW =	**1.000**

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Greenwich Club RIPDES PERMIT #: RI0023434

Month	Upper 90th% pH	Acute Criteria* mg/L as N	Chronic Criteria* mg/L as N
May	7.9	10.1	1.33
Jun	7.9	10.1	1.33
Jul	7.9	10.1	1.33
Aug	7.9	10.1	1.33
Sep	7.9	10.1	1.33
Oct	7.9	10.1	1.33
Nov	7.9	10.1	2.67
Dec	7.9	10.1	2.67
Jan	7.9	10.1	2.67
Feb	7.9	10.1	2.67
Mar	7.9	10.1	2.67
Apr	7.9	10.1	2.67

**NOTE: Criteria from Appendix B of the RI Water Quality Regs., July 2006, Amended December 2010*

winter T: 15°C
summer T: 26°C

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Greenwich Club RIPDES PERMIT #: RI0023434

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS:							
TOXIC METALS AND CYANIDE							
ANTIMONY	7440360		450	360	10	640	8
ARSENIC (limits are total recoverable)	7440382	NA	340	272	150	1.4	1.12
ASBESTOS	1332214			No Criteria			No Criteria
BERYLLIUM	7440417		7.5	6	0.17		0.136
CADMIUM (limits are total recoverable)	7440439	NA	0.522206507	0.416931063	0.093696824		0.077515416
CHROMIUM III (limits are total recoverable)	16065831	NA	183.0659069	463.4579922	23.81311337		22.15173337
CHROMIUM VI (limits are total recoverable)	18540299	NA	16	13.03462322	11		9.147609148
COPPER (limits are total recoverable)	7440508	NA	3.640069619	3.033391349	2.739313654		2.282761378
CYANIDE	57125		22	17.6	5.2	140	4.16
LEAD (limits are total recoverable)	7439921	NA	13.88217279	11.18401329	0.540968344		0.435824942
MERCURY (limits are total recoverable)	7439976	NA	1.4	1.317647059	0.77	0.15	0.141176471
NICKEL (limits are total recoverable)	7440020	NA	144.9178377	116.1666034	16.09589771	4600	12.91546456
SELENIUM (limits are total recoverable)	7782492	NA	20	16	5	4200	4
SILVER (limits are total recoverable)	7440224	NA	0.31788916	0.299189798	NA		No Criteria
THALLIUM	7440280		46	36.8	1	0.47	0.376
ZINC (limits are total recoverable)	7440666	NA	36.20176511	29.61289579	36.49789406	26000	29.61289579
VOLATILE ORGANIC COMPOUNDS							
ACROLEIN	107028		2.9	2.32	0.06	290	0.048
ACRYLONITRILE	107131		378	302.4	8.4	2.5	2
BENZENE	71432		265	212	5.9	510	4.72
BROMOFORM	75252		1465	1172	33	1400	26.4
CARBON TETRACHLORIDE	56235		1365	1092	30	16	12.8
CHLOROBENZENE	108907		795	636	18	1600	14.4
CHLORODIBROMOMETHANE	124481			No Criteria		130	104
CHLOROFORM	67663		1445	1156	32	4700	25.6
DICHLOROBROMOMETHANE	75274			No Criteria		170	136
1,2DICHLOROETHANE	107062		5900	4720	131	370	104.8
1,1DICHLOROETHYLENE	75354		580	464	13	7100	10.4
1,2DICHLOROPROPANE	78875		2625	2100	58	150	46.4
1,3DICHLOROPROPYLENE	542756			No Criteria		21	16.8
ETHYLBENZENE	100414		1600	1280	36	2100	28.8
BROMOMETHANE (methyl bromide)	74839			No Criteria		1500	1200
CHLOROMETHANE (methyl chloride)	74873			No Criteria			No Criteria
METHYLENE CHLORIDE	75092		9650	7720	214	5900	171.2

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Greenwich Club RIPDES PERMIT #: RI0023434

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,1,2,2TETRACHLOROETHANE	79345		466	372.8	10	40	8
TETRACHLOROETHYLENE	127184		240	192	5.3	33	4.24
TOLUENE	108883		635	508	14	15000	11.2
1,2TRANSDICHLOROETHYLENE	156605			No Criteria		10000	8000
1,1,1TRICHLOROETHANE	71556			No Criteria			No Criteria
1,1,2TRICHLOROETHANE	79005		900	720	20	160	16
TRICHLOROETHYLENE	79016		1950	1560	43	300	34.4
VINYL CHLORIDE	75014			No Criteria		2.4	1.92
ACID ORGANIC COMPOUNDS							
2CHLOROPHENOL	95578		129	103.2	2.9	150	2.32
2,4DICHLOROPHENOL	120832		101	80.8	2.2	290	1.76
2,4DIMETHYLPHENOL	105679		106	84.8	2.4	850	1.92
4,6DINITRO2METHYL PHENOL	534521			No Criteria		280	224
2,4DINITROPHENOL	51285		31	24.8	0.69	5300	0.552
4NITROPHENOL	88755			No Criteria			No Criteria
PENTACHLOROPHENOL	87865		0.061310576	0.049048461	0.047037838	30	0.037630271
PHENOL	108952		251	200.8	5.6	1700000	4.48
2,4,6TRICHLOROPHENOL	88062		16	12.8	0.36	24	0.288
BASE NEUTRAL COMPUNDS							
ACENAPHTHENE	83329		85	68	1.9	990	1.52
ANTHRACENE	120127			No Criteria		40000	32000
BENZIDINE	92875			No Criteria		0.002	0.0016
POLYCYCLIC AROMATIC HYDROCARBONS				No Criteria		0.18	0.144
BIS(2CHLOROETHYL)ETHER	111444			No Criteria		5.3	4.24
BIS(2CHLOROISOPROPYL)ETHER	108601			No Criteria		65000	52000
BIS(2ETHYLHEXYL)PHTHALATE	117817		555	444	12	22	9.6
BUTYL BENZYL PHTHALATE	85687		85	68	1.9	1900	1.52
2CHLORONAPHTHALENE	91587			No Criteria		1600	1280
1,2DICHLOROBENZENE	95501		79	63.2	1.8	1300	1.44
1,3DICHLOROBENZENE	541731		390	312	8.7	960	6.96
1,4DICHLOROBENZENE	106467		56	44.8	1.2	190	0.96
3,3DICHLOROBENZIDENE	91941			No Criteria		0.28	0.224
DIETHYL PHTHALATE	84662		2605	2084	58	44000	46.4
DIMETHYL PHTHALATE	131113		1650	1320	37	1100000	29.6
DI-n-BUTYL PHTHALATE	84742			No Criteria		4500	3600
2,4DINITROTOLUENE	121142		1550	1240	34	34	27.2

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Greenwich Club RIPDES PERMIT #: RI0023434

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
1,2DIPHENYLHYDRAZINE	122667		14	11.2	0.31	2	0.248
FLUORANTHENE	206440		199	159.2	4.4	140	3.52
FLUORENE	86737			No Criteria		5300	4240
HEXACHLOROBENZENE	118741			No Criteria		0.0029	0.00232
HEXACHLOROBUTADIENE	87683			No Criteria		180	144
HEXACHLOROCYCLOPENTADIENE	77474		0.35	0.28	0.008	1100	0.0064
HEXACHLOROETHANE	67721		49	39.2	1.1	33	0.88
ISOPHORONE	78591		5850	4680	130	9600	104
NAPHTHALENE	91203		115	92	2.6		2.08
NITROBENZENE	98953		1350	1080	30	690	24
N-NITROSODIMETHYLAMINE	62759			No Criteria		30	24
N-NITROSODI-N-PROPYLAMINE	621647			No Criteria		5.1	4.08
N-NITROSODIPHENYLAMINE	86306		293	234.4	6.5	60	5.2
PYRENE	129000			No Criteria		4000	3200
1,2,4trichlorobenzene	120821		75	60	1.7	70	1.36
PESTICIDES/PCBs							
ALDRIN	309002		3	2.4		0.0005	0.0004
Alpha BHC	319846			No Criteria		0.049	0.0392
Beta BHC	319857			No Criteria		0.17	0.136
Gamma BHC (Lindane)	58899		0.95	0.76		1.8	1.44
CHLORDANE	57749		2.4	1.92	0.0043	0.0081	0.00344
4,4DDT	50293		1.1	0.88	0.001	0.0022	0.0008
4,4DDE	72559			No Criteria		0.0022	0.00176
4,4DDD	72548			No Criteria		0.0031	0.00248
DIELDRIN	60571		0.24	0.192	0.056	0.00054	0.000432
ENDOSULFAN (alpha)	959988		0.22	0.176	0.056	89	0.0448
ENDOSULFAN (beta)	33213659		0.22	0.176	0.056	89	0.0448
ENDOSULFAN (sulfate)	1031078			No Criteria		89	71.2
ENDRIN	72208		0.086	0.0688	0.036	0.06	0.0288
ENDRIN ALDEHYDE	7421934			No Criteria		0.3	0.24
HEPTACHLOR	76448		0.52	0.416	0.0038	0.00079	0.000632
HEPTACHLOR EPOXIDE	1024573		0.52	0.416	0.0038	0.00039	0.000312
POLYCHLORINATED BIPHENYLS3	1336363			No Criteria	0.014	0.00064	0.000512
2,3,7,8TCDD (Dioxin)	1746016			No Criteria		0.000000051	4.08E-08
TOXAPHENE	8001352		0.73	0.584	0.0002	0.0028	0.00016
TRIBUTYLTIN			0.46	0.368	0.072		0.0576

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Greenwich Club RIPDES PERMIT #: RI0023434

NOTE: METALS CRITERIA ARE EXPRESSED AS DISSOLVED, METALS LIMITS ARE EXPRESSED AS TOTAL

CHEMICAL NAME	CAS #	BACKGROUND CONCENTRATION (ug/L)	FRESHWATER CRITERIA ACUTE (ug/L)	DAILY MAX LIMIT (ug/L)	FRESHWATER CRITERIA CHRONIC (ug/L)	HUMAN HEALTH NON-CLASS A CRITERIA (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS:							
OTHER SUBSTANCES							
ALUMINUM (limits are total recoverable)	7429905	NA	750	600	87		69.6
AMMONIA as N(winter/summer)	7664417		10.1 | 10.1	8080 | 8080	2.67 | 1.33		2136 | 1064
4BROMOPHENYL PHENYL ETHER			18	14.4	0.4		0.32
CHLORIDE	16887006		860000	688000	230000		184000
CHLORINE	7782505		19	19	11		11
4CHLORO2METHYLPHENOL			15	12	0.32		0.256
1CHLORONAPHTHALENE			80	64	1.8		1.44
4CHLOROPHENOL	106489		192	153.6	4.3		3.44
2,4DICHLORO6METHYLPHENOL			22	17.6	0.48		0.384
1,1DICHLOROPROPANE			1150	920	26		20.8
1,3DICHLOROPROPANE	142289		303	242.4	6.7		5.36
2,3DINITROTOLUENE			17	13.6	0.37		0.296
2,4DINITRO6METHYL PHENOL			12	9.6	0.26		0.208
IRON	7439896			No Criteria	1000		800
pentachlorobenzene	608935		13	10.4	0.28		0.224
PENTACHLOROETHANE			362	289.6	8		6.4
1,2,3,5tetrachlorobenzene			321	256.8	7.1		5.68
1,1,1,2TETRACHLOROETHANE	630206		980	784	22		17.6
2,3,4,6TETRACHLOROPHENOL	58902		7	5.6	0.16		0.128
2,3,5,6TETRACHLOROPHENOL			8.5	6.8	0.19		0.152
2,4,5TRICHLOROPHENOL	95954		23	18.4	0.51		0.408
2,4,6TRINITROPHENOL	88062		4235	3388	94		75.2
XYLENE	1330207		133	106.4	3		2.4

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Greenwich Club RIPDES PERMIT #: RI0023434

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
PRIORITY POLLUTANTS:			
TOXIC METALS AND CYANIDE			
ANTIMONY	7440360	360.00	8.00
ARSENIC, TOTAL	7440382	272.00	1.12
ASBESTOS	1332214	No Criteria	0.00000
BERYLLIUM	7440417	6.00	0.14
CADMIUM, TOTAL	7440439	0.42	0.07752
CHROMIUM III, TOTAL	16065831	463.46	22.15
CHROMIUM VI, TOTAL	18540299	13.03	9.15
COPPER, TOTAL	7440508	3.03	2.28
CYANIDE	57125	17.60	4.16
LEAD, TOTAL	7439921	11.18	0.44
MERCURY, TOTAL	7439976	1.32	0.14
NICKEL, TOTAL	7440020	116.17	12.92
SELENIUM, TOTAL	7782492	16.00	4.00
SILVER, TOTAL	7440224	0.30	No Criteria
THALLIUM	7440280	36.80	0.38
ZINC, TOTAL	7440666	29.61	29.61
VOLATILE ORGANIC COMPOUNDS			
ACROLEIN	107028	2.32	0.04800
ACRYLONITRILE	107131	302.40	2.00
BENZENE	71432	212.00	4.72
BROMOFORM	75252	1172.00	26.40
CARBON TETRACHLORIDE	56235	1092.00	12.80
CHLOROBENZENE	108907	636.00	14.40
CHLORODIBROMOMETHANE	124481	No Criteria	104.00
CHLOROFORM	67663	1156.00	25.60
DICHLOROBROMOMETHANE	75274	No Criteria	136.00
1,2DICHLOROETHANE	107062	4720.00	104.80
1,1DICHLOROETHYLENE	75354	464.00	10.40
1,2DICHLOROPROPANE	78875	2100.00	46.40
1,3DICHLOROPROPYLENE	542756	No Criteria	16.80
ETHYLBENZENE	100414	1280.00	28.80
BROMOMETHANE (methyl bromide)	74839	No Criteria	1200.00
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00000
METHYLENE CHLORIDE	75092	7720.00	171.20
1,1,2,2TETRACHLOROETHANE	79345	372.80	8.00
TETRACHLOROETHYLENE	127184	192.00	4.24
TOLUENE	108883	508.00	11.20
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	8000.00
1,1,1TRICHLOROETHANE	71556	No Criteria	0.00000
1,1,2TRICHLOROETHANE	79005	720.00	16.00
TRICHLOROETHYLENE	79016	1560.00	34.40
VINYL CHLORIDE	75014	No Criteria	1.92
ACID ORGANIC COMPOUNDS			
2CHLOROPHENOL	95578	103.20	2.32
2,4DICHLOROPHENOL	120832	80.80	1.76
2,4DIMETHYLPHENOL	105679	84.80	1.92
4,6DINITRO2METHYL PHENOL	534521	No Criteria	224.00
2,4DINITROPHENOL	51285	24.80	0.55
4NITROPHENOL	88755	No Criteria	0.00000
PENTACHLOROPHENOL	87865	0.05	0.03763
PHENOL	108952	200.80	4.48
2,4,6TRICHLOROPHENOL	88062	12.80	0.29
BASE NEUTRAL COMPUNDS			
ACENAPHTHENE	83329	68.00	1.52
ANTHRACENE	120127	No Criteria	32000.00
BENZIDINE	92875	No Criteria	0.00160
PAHs		No Criteria	0.14
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	4.24
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	52000.00
BIS(2ETHYLHEXYL)PHTHALATE	117817	444.00	9.60
BUTYL BENZYL PHTHALATE	85687	68.00	1.52
2CHLORONAPHTHALENE	91587	No Criteria	1280.00
1,2DICHLOROBENZENE	95501	63.20	1.44
1,3DICHLOROBENZENE	541731	312.00	6.96
1,4DICHLOROBENZENE	106467	44.80	0.96
3,3DICHLOROBENZIDENE	91941	No Criteria	0.22
DIETHYL PHTHALATE	84662	2084.00	46.40
DIMETHYL PHTHALATE	131113	1320.00	29.60
DI-n-BUTYL PHTHALATE	84742	No Criteria	3600.00
2,4DINITROTOLUENE	121142	1240.00	27.20
1,2DIPHENYLHYDRAZINE	122667	11.20	0.25
FLUORANTHENE	206440	159.20	3.52

CALCULATION OF WATER QUALITY BASED NON-CLASS AA FRESHWATER DISCHARGE LIMITS

FACILITY NAME: Greenwich Club RIPDES PERMIT #: RI0023434

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
FLUORENE	86737	No Criteria	4240.00
HEXACHLOROBENZENE	118741	No Criteria	0.00232
HEXACHLOROBUTADIENE	87683	No Criteria	144.00
HEXACHLOROCYCLOPENTADIENE	77474	0.28	0.00640
HEXACHLOROETHANE	67721	39.20	0.88
ISOPHORONE	78591	4680.00	104.00
NAPHTHALENE	91203	92.00	2.08
NITROBENZENE	98953	1080.00	24.00
N-NITROSODIMETHYLAMINE	62759	No Criteria	24.00
N-NITROSODI-N-PROPYLAMINE	621647	No Criteria	4.08
N-NITROSODIPHENYLAMINE	86306	234.40	5.20
PYRENE	129000	No Criteria	3200.00
1,2,4trichlorobenzene	120821	60.00	1.36
PESTICIDES/PCBs			
ALDRIN	309002	2.40	0.00040
Alpha BHC	319846	No Criteria	0.04
Beta BHC	319857	No Criteria	0.14
Gamma BHC (Lindane)	58899	0.76	0.76
CHLORDANE	57749	1.92	0.00344
4,4DDT	50293	0.88	0.00080
4,4DDE	72559	No Criteria	0.00176
4,4DDD	72548	No Criteria	0.00248
DIELDRIN	60571	0.19	0.00043
ENDOSULFAN (alpha)	959988	0.18	0.04480
ENDOSULFAN (beta)	33213659	0.18	0.04480
ENDOSULFAN (sulfate)	1031078	No Criteria	71.20
ENDRIN	72208	0.07	0.03
ENDRIN ALDEHYDE	7421934	No Criteria	0.24
HEPTACHLOR	76448	0.42	0.00
HEPTACHLOR EPOXIDE	1024573	0.42	0.00
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.00
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00
TOXAPHENE	8001352	0.58	0.00
TRIBUTYLTIN		0.37	0.06

CHEMICAL NAME	CAS#	DAILY MAX LIMIT (ug/L)	MONTHLY AVE LIMIT (ug/L)
NON PRIORITY POLLUTANTS:			
OTHER SUBSTANCES			
ALUMINUM, TOTAL	7429905	600.00	69.60
AMMONIA (as N), WINTER (NOV-AP	7664417	8080.00	2136.00
AMMONIA (as N), SUMMER (MAY-O	7664417	8080.00	1064.00
4BROMOPHENYL PHENYL ETHER		14.40	0.32
CHLORIDE	16887006	688000.00	184000.00
CHLORINE	7782505	19.00	11.00
4CHLORO2METHYLPHENOL		12.00	0.26
1CHLORONAPHTHALENE		64.00	1.44
4CHLOROPHENOL	106489	153.60	3.44
2,4DICHLORO6METHYLPHENOL		17.60	0.38
1,1DICHLOROPROPANE		920.00	20.80
1,3DICHLOROPROPANE	142289	242.40	5.36
2,3DINITROTOLUENE		13.60	0.30
2,4DINITRO6METHYL PHENOL		9.60	0.21
IRON	7439896	No Criteria	800.00
pentachlorobenzene	608935	10.40	0.22
PENTACHLOROETHANE		289.60	6.40
1,2,3,5tetrachlorobenzene		256.80	5.68
1,1,1,2TETRACHLOROETHANE	630206	784.00	17.60
2,3,4,6TETRACHLOROPHENOL	58902	5.60	0.13
2,3,5,6TETRACHLOROPHENOL		6.80	0.15
2,4,5TRICHLOROPHENOL	95954	18.40	0.41
2,4,6TRINITROPHENOL	88062	3388.00	75.20
XYLENE	1330207	106.40	2.40

ATTACHMENT A-3 – Potential Permit Limits Comparison

Facility Name: *Greenwich Club*

RIPDES Permit #: *RI0023434*

Outfalls #: *001A*

NOTE: METALS LIMITS ARE TOTAL METALS

Parameter	CAS #	Concentration Limits (ug/L) Based on WQ Criteria		Antideg. Limits (ug/L)	Ave. DMR Data (ug/L) 1/12-12/16		Potential Permit Limits (ug/L)		Reasonable Potential?	
		Daily Max	Monthly Ave	Monthly Ave	Daily Max	Monthly Ave	Daily Max	Monthly Ave	Daily Max	Mo. Ave.
PRIORITY POLLUTANTS										
TOXIC METALS AND CYANIDE										
ANTIMONY	7440360	360.00	8.00	---	---	---	360	8		
ARSENIC (limits are total recoverable)	7440382	272.00	1.12	---	---	---	272	1.12		
ASBESTOS	1332214	No Criteria	0.00	---	---	---	---	0		
BERYLLIUM	7440417	6.00	0.14	---	---	---	6	0.136		
CADMIUM (limits are total recoverable)	7440439	0.42	0.08	---	---	---	0.41693106	0.077515416		
CHROMIUM III (limits are total recoverable)	16065831	463.46	22.15	---	---	---	463.457992	22.15173337		
CHROMIUM VI (limits are total recoverable)	18540299	13.03	9.15	---	---	---	13.0346232	9.147609148		
COPPER (limits are total recoverable)	7440508	3.03	2.28	---	---	---	3.03339135	2.282761378		
CYANIDE	57125	17.60	4.16	---	---	---	17.6	4.16		
LEAD (limits are total recoverable)	7439921	11.18	0.44	---	---	---	11.1840133	0.435824942		
MERCURY (limits are total recoverable)	7439976	1.32	0.14	---	---	---	1.31764706	0.141176471		
NICKEL (limits are total recoverable)	7440020	116.17	12.92	---	---	---	116.166603	12.91546456		
SELENIUM (limits are total recoverable)	7782492	16.00	4.00	---	---	---	16	4		
SILVER (limits are total recoverable)	7440224	0.30	No Criteria	---	---	---	0.2991898	0.299189798		
THALLIUM	7440280	36.80	0.38	---	---	---	36.8	0.376		
ZINC (limits are total recoverable)	7440666	29.61	29.61	---	---	---	29.6128958	29.61289579		
VOLATILE ORGANIC COMPOUNDS										
ACROLEIN	107028	2.32	0.04800	---	---	---	2.32	0.048		
ACRYLONITRILE	107131	302.40	2.00	---	---	---	302.4	2		
BENZENE	71432	212.00	4.72	---	---	---	212	4.72		
BROMOFORM	75252	1172.00	26.40	---	---	---	1172	26.4		
CARBON TETRACHLORIDE	56235	1092.00	12.80	---	---	---	1092	12.8		
CHLOROBENZENE	108907	636.00	14.40	---	---	---	636	14.4		
CHLORODIBROMOMETHANE	124481	No Criteria	104.00	---	---	---	---	104		
CHLOROFORM	67663	1156.00	25.60	---	---	---	1156	25.6		
DICHLOROBROMOMETHANE	75274	No Criteria	136.00	---	---	---	---	136		
1,2DICHLOROETHANE	107062	4720.00	104.80	---	---	---	4720	104.8		
1,1DICHLOROETHYLENE	75354	464.00	10.40	---	---	---	464	10.4		
1,2DICHLOROPROPANE	78875	2100.00	46.40	---	---	---	2100	46.4		

1,3DICHLOROPROPYLENE	542756	No Criteria	16.80	---	---	---	---	16.8		
ETHYLBENZENE	100414	1280.00	28.80	---	---	---	1280	28.8		
BROMOMETHANE (methyl bromide)	74839	No Criteria	1200.00	---	---	---	---	1200		
CHLOROMETHANE (methyl chloride)	74873	No Criteria	0.00	---	---	---	---	0		
METHYLENE CHLORIDE	75092	7720.00	171.20	---	---	---	7720	171.2		
1,1,2,2TETRACHLOROETHANE	79345	372.80	8.00	---	---	---	372.8	8		
TETRACHLOROETHYLENE	127184	192.00	4.24	---	---	---	192	4.24		
TOLUENE	108883	508.00	11.20	---	---	---	508	11.2		
1,2TRANSDICHLOROETHYLENE	156605	No Criteria	8000.00	---	---	---	---	8000		
1,1,1TRICHLOROETHANE	71556	No Criteria	0.00	---	---	---	---	0		
1,1,2TRICHLOROETHANE	79005	720.00	16.00	---	---	---	720	16		
TRICHLOROETHYLENE	79016	1560.00	34.40	---	---	---	1560	34.4		
VINYL CHLORIDE	75014	No Criteria	1.92	---	---	---	---	1.92		
ACID ORGANIC COMPOUNDS										
2CHLOROPHENOL	95578	103.20	2.32	---	---	---	103.2	2.32		
2,4DICHLOROPHENOL	120832	80.80	1.76	---	---	---	80.8	1.76		
2,4DIMETHYLPHENOL	105679	84.80	1.92	---	---	---	84.8	1.92		
4,6DINITRO2METHYL PHENOL	534521	No Criteria	224.00	---	---	---	---	224		
2,4DINITROPHENOL	51285	24.80	0.55	---	---	---	24.8	0.552		
4NITROPHENOL	88755	No Criteria	0.00	---	---	---	---	0		
PENTACHLOROPHENOL	87865	0.05	0.04	---	---	---	0.04904846	0.037630271		
PHENOL	108952	200.80	4.48	---	---	---	200.8	4.48		
2,4,6TRICHLOROPHENOL	88062	12.80	0.29	---	---	---	12.8	0.288		
BASE NEUTRAL COMPOUNDS										
ACENAPHTHENE	83329	68.00	1.52	---	---	---	68	1.52		
ANTHRACENE	120127	No Criteria	32000.00	---	---	---	---	32000		
BENZIDINE	92875	No Criteria	0.00	---	---	---	---	0.0016		
POLYCYCLIC AROMATIC HYDROCARBONS		No Criteria	0.14	---	---	---	---	0.144		
BIS(2CHLOROETHYL)ETHER	111444	No Criteria	4.24	---	---	---	---	4.24		
BIS(2CHLOROISOPROPYL)ETHER	108601	No Criteria	52000.00	---	---	---	---	52000		
BIS(2ETHYLHEXYL)PHTHALATE	117817	444.00	9.60	---	---	---	444	9.6		
BUTYL BENZYL PHTHALATE	85687	68.00	1.52	---	---	---	68	1.52		
2CHLORONAPHTHALENE	91587	No Criteria	1280.00	---	---	---	---	1280		
1,2DICHLOROBENZENE	95501	63.20	1.44	---	---	---	63.2	1.44		
1,3DICHLOROBENZENE	541731	312.00	6.96	---	---	---	312	6.96		
1,4DICHLOROBENZENE	106467	44.80	0.96	---	---	---	44.8	0.96		
3,3DICHLOROBENZIDENE	91941	No Criteria	0.22	---	---	---	---	0.224		
DIETHYL PHTHALATE	84662	2084.00	46.40	---	---	---	2084	46.4		
DIMETHYL PHTHALATE	131113	1320.00	29.60	---	---	---	1320	29.6		
DInBUTYL PHTHALATE	84742	No Criteria	3600.00	---	---	---	---	3600		

2,4DINITROTOLUENE	121142	1240.00	27.20	---	---	---	1240	27.2		
1,2DIPHENYLHYDRAZINE	122667	11.20	0.25	---	---	---	11.2	0.248		
FLUORANTHENE	206440	159.20	3.52	---	---	---	159.2	3.52		
FLUORENE	86737	No Criteria	4240.00	---	---	---	---	4240		
HEXACHLOROBENZENE	118741	No Criteria	0.00232	---	---	---	---	0.00232		
HEXACHLOROBUTADIENE	87683	No Criteria	144.00	---	---	---	---	144		
HEXACHLOROCYCLOPENTADIENE	77474	0.28	0.00640	---	---	---	0.28	0.0064		
HEXACHLOROETHANE	67721	39.20	0.88	---	---	---	39.2	0.88		
ISOPHORONE	78591	4680.00	104.00	---	---	---	4680	104		
NAPHTHALENE	91203	92.00	2.08	---	---	---	92	2.08		
NITROBENZENE	98953	1080.00	24.00	---	---	---	1080	24		
NNITROSODIMETHYLAMINE	62759	No Criteria	24.00	---	---	---	---	24		
NNITROSODINPROPYLAMINE	621647	No Criteria	4.08	---	---	---	---	4.08		
NNITROSODIPHENYLAMINE	86306	234.40	5.20	---	---	---	234.4	5.2		
PYRENE	129000	No Criteria	3200.00	---	---	---	---	3200		
1,2,4trichlorobenzene	120821	60.00	1.36	---	---	---	60	1.36		
PESTICIDES/PCBs										
ALDRIN	309002	2.40	0.00	---	---	---	2.4	0.0004		
Alpha BHC	319846	No Criteria	0.04	---	---	---	---	0.0392		
Beta BHC	319857	No Criteria	0.14	---	---	---	---	0.136		
Gamma BHC (Lindane)	58899	0.76	0.76	---	---	---	0.76	0.76		
CHLORDANE	57749	1.92	0.00	---	---	---	1.92	0.00344		
4,4DDT	50293	0.88	0.00	---	---	---	0.88	0.0008		
4,4DDE	72559	No Criteria	0.00	---	---	---	---	0.00176		
4,4DDD	72548	No Criteria	0.00	---	---	---	---	0.00248		
DIELDRIN	60571	0.19	0.00	---	---	---	0.192	0.000432		
ENDOSULFAN (alpha)	959988	0.18	0.04	---	---	---	0.176	0.0448		
ENDOSULFAN (beta)	33213659	0.18	0.04	---	---	---	0.176	0.0448		
ENDOSULFAN (sulfate)	1031078	No Criteria	71.20	---	---	---	---	71.2		
ENDRIN	72208	0.07	0.03	---	---	---	0.0688	0.0288		
ENDRIN ALDEHYDE	7421934	No Criteria	0.24	---	---	---	---	0.24		
HEPTACHLOR	76448	0.42	0.00	---	---	---	0.416	0.000632		
HEPTACHLOR EPOXIDE	1024573	0.42	0.00	---	---	---	0.416	0.000312		
POLYCHLORINATED BIPHENYLS3	1336363	No Criteria	0.00	---	---	---	---	0.000512		
2,3,7,8TCDD (Dioxin)	1746016	No Criteria	0.00	---	---	---	---	4.08E-08		
TOXAPHENE	8001352	0.58	0.00	---	---	---	0.584	0.00016		
TRIBUTYLTIN		0.37	0.06				0.368	0.0576		
NON PRIORITY POLLUTANTS:										
OTHER SUBSTANCES										
ALUMINUM (limits are total recoverable)	7429905	600.00	69.60	---	---	---	600	69.6		

AMMONIA (winter)	7664417	8080.00	2136.00	---	---	---	8080	2136		
AMMONIA (summer)		8080.00	1064.00	---	---	---	8080	1064		
4BROMOPHENYL PHENYL ETHER	16887006	14.40	0.32	---	---	---	14.4	0.32		
CHLORIDE	7782505	688000.00	184000.00				688000	184000		
CHLORINE		19.00	11.00	---	25	---	19	11	Y	
4CHLORO2METHYLPHENOL		12.00	0.26	---	---	---	12	0.256		
1CHLORONAPHTHALENE	106489	64.00	1.44	---	---	---	64	1.44		
4CHLOROPHENOL		153.60	3.44	---	---	---	153.6	3.44		
2,4DICHLORO6METHYLPHENOL		17.60	0.38	---	---	---	17.6	0.384		
1,1DICHLOROPROPANE	142289	920.00	20.80	---	---	---	920	20.8		
1,3DICHLOROPROPANE		242.40	5.36	---	---	---	242.4	5.36		
2,3DINITROTOLUENE		13.60	0.30	---	---	---	13.6	0.296		
2,4DINITRO6METHYL PHENOL	7439896	9.60	0.21	---	---	---	9.6	0.208		
IRON	608935	No Criteria	800.00				---	800		
pentachlorobenzene		10.40	0.22	---	---	---	10.4	0.224		
PENTACHLOROETHANE		289.60	6.40	---	---	---	289.6	6.4		
1,2,3,5tetrachlorobenzene	630206	256.80	5.68	---	---	---	256.8	5.68		
1,1,1,2TETRACHLOROETHANE	58902	784.00	17.60	---	---	---	784	17.6		
2,3,4,6TETRACHLOROPHENOL		5.60	0.13	---	---	---	5.6	0.128		
2,3,5,6TETRACHLOROPHENOL	95954	6.80	0.15	---	---	---	6.8	0.152		
2,4,5TRICHLOROPHENOL	88062	18.40	0.41	---	---	---	18.4	0.408		
2,4,6TRINITROPHENOL	1330207	3388.00	75.20	---	---	---	3388	75.2		
XYLENE		106.40	2.40				106.4	2.4		

PART II
TABLE OF CONTENTS

GENERAL REQUIREMENTS

(a) Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws and the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(1) The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

(2) The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307 or 308 of the Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment of not more than 1 year, or both.

(3) Chapter 46-12 of the Rhode Island General Laws provides that any person who violates a permit condition is subject to a civil penalty of not more than $5,000 per day of such violation. Any person who willfully or negligently violates a permit condition is subject to a criminal penalty of not more than $10,000 per day of such violation and imprisonment for not more than 30 days, or both. Any person who knowingly makes any false statement in connection with the permit is subject to a criminal penalty of not more than $5,000 for each instance of violation or by imprisonment for not more than 30 days, or both.

(b) Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

(c) Need to Halt or Reduce Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(e) Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures, and, where applicable, compliance with DEM "Rules and Regulations Pertaining to the Operation and Maintenance of Wastewater Treatment Facilities" and "Rules and Regulations Pertaining to the Disposal and Utilization of Wastewater Treatment Facility Sludge." This provision requires the operation of back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of the permit.

(f) Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause, including but not limited to: (1) Violation of any terms or conditions of this permit; (2) Obtaining this permit by misrepresentation or failure to disclose all relevant facts; or (3) A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(g) Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

(h) Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

(i) Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

(4) Sample or monitor any substances or parameters at any location, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA or Rhode Island law.

(j) Monitoring and Records

(1) Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the discharge over the sampling and reporting period.

(2) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings from continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

(3) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 and applicable Rhode Island regulations, unless other test procedures have been specified in this permit.

(5) The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall upon conviction, be punished by a fine of not more than $10,000 per violation or by imprisonment for not more than 6 months per violation or by both. Chapter 46-12 of the Rhode Island General Laws also provides that such acts are subject to a fine of not more than $5,000 per violation, or by imprisonment for not more than 30 days per violation, or by both.

(6) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

(7) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136, applicable State regulations, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(k) Signatory Requirement

All applications, reports, or information submitted to the Director shall be signed and certified in accordance with Rule 12 of the Rhode Island Pollutant Discharge Elimination System (RIPDES) Regulations. Rhode Island General Laws, Chapter 46-12 provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $5,000 per violation, or by imprisonment for not more than 30 days per violation, or by both.

(l) Reporting Requirements

(1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.

(2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with the permit requirements.

(3) Transfers. This permit is not transferable to any person except after written notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under State and Federal law.

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(5) Twenty-four hour reporting. The permittee shall immediately report any noncompliance which may endanger health or the environment by calling DEM at (401) 222-4700 or (401) 222-3070 at night.

A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following information must be reported immediately:

(i) Any unanticipated bypass which causes a violation of any effluent limitation in the permit; or

(ii) Any upset which causes a violation of any effluent limitation in the permit; or

(iii) Any violation of a maximum daily discharge limitation for any of the pollutants specifically listed by the Director in the permit.

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

(6) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (1), (2), and (5), of this section, at the time monitoring reports are submitted. The reports shall contain the information required in paragraph (l)(5) of the section.

(7) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, they shall promptly submit such facts or information.

(m) Bypass

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(1) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (2) and (3) of this section.

(2) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Rule 14.18 of the RIPDES Regulations.

(3) Prohibition of bypass.

(i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, where "severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The permittee submitted notices as required under paragraph (2) of this section.

(ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (3)(i) of this section.

(n) Upset

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(1) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (2) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(2) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) An upset occurred and that the permittee can identify the cause(s) of the upset;

(b) The permitted facility was at the time being properly operated;

(c) The permittee submitted notice of the upset as required in Rule 14.18 of the RIPDES Regulations; and

(d) The permittee complied with any remedial measures required under Rule 14.05 of the RIPDES Regulations.

(3) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

(o) Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. Discharges which cause a violation of water quality standards are prohibited. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different or increased discharges of pollutants must be reported by submission of a new NPDES application at least 180 days prior to commencement of such discharges, or if such changes will not violate the effluent limitations specified in this permit, by notice, in writing, to the Director of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.

(p) Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner consistent with applicable Federal and State laws and regulations including, but not limited to the CWA and the Federal Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq., Rhode Island General Laws, Chapters 46-12, 23-19.1 and regulations promulgated thereunder.

(q) Power Failures

In order to maintain compliance with the effluent limitation and prohibitions of this permit, the permittee shall either:

> In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or if such alternative power source is not in existence, and no date for its implementation appears in Part I,

> Halt reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

(r) Availability of Reports

Except for data determined to be confidential under paragraph (w) below, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the DEM, 291 Promenade Street, Providence, Rhode Island. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA and under Section 46-12-14 of the Rhode Island General Laws.

(s) State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law.

(t) Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, and local laws and regulations.

(u) Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

(v) Reopener Clause

The Director reserves the right to make appropriate revisions to this permit in order to incorporate any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA or State law. In accordance with Rules 15 and 23 of the RIPDES Regulations, if any effluent standard or prohibition, or water quality standard is promulgated under the CWA or under State law which is more stringent than any limitation on the pollutant in the permit, or controls a pollutant not limited in the permit, then the Director may promptly reopen the permit and modify or revoke and reissue the permit to conform to the applicable standard.

(w) Confidentiality of Information

(1) Any information submitted to DEM pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, DEM may make the information available to the pubic without further notice.

(2) Claims of confidentiality for the following information will be denied:

(i) The name and address of any permit applicant or permittee;

(ii) Permit applications, permits and any attachments thereto; and

(iii) NPDES effluent data.

(x) Best Management Practices

The permittee shall adopt Best Management Practices (BMP) to control or abate the discharge of toxic pollutants and hazardous substances associated with or ancillary to the industrial manufacturing or treatment process and the Director may request the submission of a BMP plan where the Director determines that a permittee's practices may contribute significant amounts of such pollutants to waters of the State.

(y) Right of Appeal

Within thirty (30) days of receipt of notice of a final permit decision, the permittee or any interested person may submit a request to the Director for an adjudicatory hearing to reconsider or contest that decision. The request for a hearing must conform to the requirements of Rule 49 of the RIPDES Regulations.

DEFINITIONS

1. For purposes of this permit, those definitions contained in the RIPDES Regulations and the Rhode Island Pretreatment Regulations shall apply.

2. The following abbreviations, when used, are defined below.

cu. M/day or M^3/day	cubic meters per day
mg/l	milligrams per liter
ug/l	micrograms per liter
lbs/day	pounds per day
kg/day	kilograms per day
Temp. ^oC	temperature in degrees Centigrade
Temp. ^oF	temperature in degrees Fahrenheit
Turb.	turbidity measured by the Nephelometric Method (NTU)
TNFR or TSS	total nonfilterable residue or total suspended solids
DO	dissolved oxygen
BOD	five-day biochemical oxygen demand unless otherwise specified
TKN	total Kjeldahl nitrogen as nitrogen
Total N	total nitrogen
NH_3-N	ammonia nitrogen as nitrogen
Total P	total phosphorus
COD	chemical oxygen demand
TOC	total organic carbon
Surfactant	surface-active agent
pH	a measure of the hydrogen ion concentration
PCB	polychlorinated biphenyl
CFS	cubic feet per second
MGD	million gallons per day
Oil & Grease	Freon extractable material
Total Coliform	total coliform bacteria
Fecal Coliform	total fecal coliform bacteria
ml/l	milliliter(s) per liter
NO_3-N	nitrate nitrogen as nitrogen
NO_2-N	nitrite nitrogen as nitrogen
NO_3-NO_2	combined nitrate and nitrite nitrogen as nitrogen
$C1_2$	total residual chlorine